

**Claims:**

1. **(Previously Presented)** A composition containing human TGF $\alpha$  "hTGF $\alpha$ ", wherein said hTGF $\alpha$  comprises the amino acid sequence of SEQ ID NO 2 or its combination with other EGF-R ligands, coupled with a carrier protein by genetic cloning before expression of said proteins or by chemical conjugation after expression of said proteins, wherein said composition contains an adjuvant, wherein said composition is able to produce a specific immune response against said hTGF $\alpha$ , and wherein said carrier protein is P64k.
2. **(Previously Presented)** The composition according to claim 1 containing recombinant human TGF $\alpha$ .
3. **(Canceled)**
4. **(Previously Presented)** The composition according to claim 1 that contains a recombinant fusion protein between hTGF $\alpha$  and P64k wherein a nucleic acid sequence encoding said fusion protein is cloned in an expression vector system and expressed in mammalian cells, bacteria or yeast.
5. **(Previously Presented)** The composition according to claim 1 that contains a recombinant fusion protein between hTGF $\alpha$  and P64k wherein a nucleic acid sequence encoding said fusion protein is cloned in an expression vector of bacteria and expressed in E. coli.
6. **(Previously Presented)** The composition according to claim 1 that contains a recombinant fusion protein between hTGF $\alpha$  and P64k wherein a nucleic acid sequence encoding said fusion protein is cloned in an expression vector of bacteria that presents a genetic sequence coding for six histidines in the N-terminal end of P64k and is expressed in E. coli.
7. **(Previously Presented)** The composition according to claim 1 wherein hTGF $\alpha$  and P64k are coupled by a chemical method.
- 8-11. **(Canceled)**
12. **(Previously Presented)** The composition according to claim 1 wherein the adjuvant is incomplete adjuvant of Freund.

13. **(Previously Presented)** The composition according to claim 1 wherein the adjuvant is  $\text{Al}(\text{OH})_3$ .

14. **(Withdrawn)** A method of immunization comprising, administration of the composition according to claim 1, wherein administration of the composition achieves specific antibodies against hTGF $\alpha$ .

15. **(Withdrawn)** The method according to claim 14, wherein anti-hTGF $\alpha$  antibodies are generated, which anti-hTGF $\alpha$  antibodies are capable of inhibiting binding of TGF $\alpha$  to its receptor in an in vitro experiment.

16. **(Withdrawn)** The method according to claim 14, wherein anti-hEGF antibodies are generated.

17. **(Withdrawn)** The method according to claim 14, wherein anti-hTGF $\alpha$  antibodies are generated, which anti-hTGF $\alpha$  antibodies are able to recognize TGF $\alpha$  in human tumor biopsies.

18. **(Withdrawn)** A method of treating a malignant disease, wherein the malignant disease is selected from among epidermoide breast carcinomas, prostate cancers, gastric cancers, and ovary epithelial cancer, which cancer expresses hTGF $\alpha$  and other ligands of EGF-R, comprising administering the composition of claim 1.

19. **(Canceled)**